GSA Directive

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CIO 2135.2A GSA Information Technology (IT) Capital Planning and Investment Control

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GENERAL SERVICES ADMINISTRATION Washington, DC 20405

CIO 2135.2A

September 29, 2006

GSA ORDER

SUBJECT: GSA Information Technology (IT) Capital Planning and Investment Control

- 1. <u>Purpose</u>. This Order establishes agency-wide policies, roles and responsibilities for GSA's IT Capital Planning and Investment Control process (CPIC). CPIC is an integrated management process for the continuous selection, control, and evaluation of IT investments over their life cycles and is focused on achieving desired outcomes in support of GSA's missions, goals, and objectives. GSA's CPIC process also includes IT enterprise architecture and IT security. This order updates GSA's CPIC process, consistent with the Clinger-Cohen Act and Office of Management and Budget (OMB) guidance.
- 2. <u>Cancellation</u>. This order cancels CIO 2135.2 dated August 10, 2004, IRM 2130.1C, The GSA Five-Year Information Technology Plan, dated October 26, 1995; CIO-IL-05-03, The Requirement for Earned Value Management in IT Contracts, and CIO-IL-06-01, Conducting Integrated Baseline Reviews.
- 3. <u>Background</u>. The Clinger-Cohen Act of 1996 created the Office of the Chief Information Officer (OCIO) in Federal agencies and mandated that CPIC be established to significantly improve how agencies plan, select, fund, control and evaluate IT investments. It also required agencies to undertake enterprise architectures designed to guide the IT investment decision process. OMB Circular A-130, Management of Federal Information Resources, provides general guidance for the Clinger-Cohen and related Acts. OMB Circular A-130 requires management to devote attention to operational information resources management (IRM) planning, by providing a one-to-five year focus on agency IRM activities and projects. Agencies must develop and maintain a five year Plan as required by 44 U.S.C. 3506 (Paperwork Reduction Act of 1995). The annually updated OMB Circular A-11, Preparation, Submission, and Execution of the Budget, provides specific guidance for content and presentation of the IT Capital Asset Plan and Business Cases (Exhibit 300s), the Agency IT Investment Portfolio (Exhibit 53) and how agencies are to use and analyze earned value data to manage IT investment performance using an ANSI Standard 748, Earned Value Management (EVM) system and methodology.
- 4. <u>Applicability</u>. This order applies to all GSA Service and Staff Offices (SSOs) including the Regional Offices. All GSA IT investments are to be managed as set forth in this Order. The GSA IT CPIC Guide is kept up-to-date and can be found on the OCIO web site under Capital Planning. The Guide provides detailed and timely guidelines, procedures, and worksheets.

5. CPIC objectives.

- a. Link the IT Portfolio to GSA's mission and business objectives.
- b. Align proposed IT investments with the strategic and tactical goals specified in the Information Resources Management (IRM) Strategic Plan/Five-Year Plan, the GSA Strategic Plan, the Performance Management Process, and the Annual Performance Plans.
- c. Implement Enterprise Architecture transition plans by selecting IT investments that will move toward achievement of the target architecture.
 - d. Use a decision making process that balances potential benefits against costs and risks.
- e. Monitor performance by measuring actual achievement of cost, schedule, and performance milestones against planned milestones. Use an ANSI Standard Earned Value Management (EVM) system to ensure IT investments are within ten percent of cost, schedule and performance goals.

f. Provide continuous feedback to help senior managers make decisions on new and on-going investments.

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- g. Advise the Administrator whether to continue, modify, or terminate a program or project where performance shows significant deviations from planned cost, schedule and performance goals. Significant deviations are a variance, over a consecutive three-month period, of minus ten percent or greater.
- 6. <u>Linkages between CPIC process and other management processes</u>. CPIC links to other agency planning and management processes.
- a. <u>Strategic and performance planning</u>. The Government Performance and Results Act of 1993 (GPRA) requires Federal agencies to develop strategic plans and annual performance plans that are tied to the agency mission, goals and budget allocation, and to report actual results against performance plans. In the

CPIC process, IT investments must demonstrate how they are aligned to the agency's strategic business goals and how they support the long term and annual performance plan goals.

- b. <u>Performance Management Process (PMP)</u>. The PMP is GSA's strategic planning, budget, and performance management cycle, managed by the Office of the Chief Financial Officer. The PMP process results in sound long-term strategic, operational, and tactical business plans based on past performance data and future performance targets established by GSA's SSOs. The IT Capital Planning process supports the PMP by aligning ongoing and proposed IT initiatives to the agency's strategic plans.
- c. <u>Information Resources Management (IRM) strategic planning</u>. The agency annually updates its IRM Strategic Plan/Five-Year Plan that addresses all of the agency's information resources. The IRM Strategic Plan/Five-Year Plan supports the GSA Strategic Plan, provides a description of how IRM activities help accomplish the agency mission, and describes the strategy for assuring the agency IT vision and goals are supported and that IRM decisions are consistent with agency planning, budget, procurement, financial management, human resources management, and program decisions.
- d. IT Capital Planning. The IT Capital Plan is operational in nature, supports the goals and missions identified in the IRM Strategic Plan/Five-Year Plan, is a living document, and is updated twice yearly first with the annual budget submission and secondly after pass back. The IT Capital Plan is the implementation plan for the budget year. The IT Capital Plan includes the IT Capital Asset Plans for major information systems, description of how the agency manages its other IT investments, information on financial management including the Report on Financial Management Activities and the agency's Financial Management Plan, and the agency IT Investment Portfolio. In addition, it includes a description of the criteria the agency used to select the investments in the portfolio, how it will control and manage the investments, and how it will evaluate the investments. The IT Capital Plan includes a summary of the security plan from the GSA five year Strategic Plan. It must demonstrate that IT projects and the enterprise architecture include security controls for components, applications, and systems that are consistent with the agency's enterprise architecture and include a plan to manage risk, protect privacy and confidentiality, and explain any planned or actual variance from the National Institute of Standards and Technology security guidance.
- e. <u>Enterprise Architecture (EA)</u>. EA is required by the Clinger-Cohen Act of 1996. The "One GSA" Enterprise Architecture is GSA's Business Modernization Blueprint. It consolidates GSA's Enterprise Architecture efforts by establishing overarching architectural guidance. IT investments must be consistent with the GSA Enterprise Architecture. The EA is an essential tool for taking a strategic approach to planning and managing IT resources.
- f. <u>The Federal Information Security Management Act of 2002 (FISMA)</u>. FISMA requires agencies to integrate security into the capital planning and enterprise architecture processes, to have a security program to conduct annual self-assessments and audits of the program and its implementation. IT investments must demonstrate that costs of appropriate IT security controls are incorporated into the lifecycle planning of the overall system. IT security is one of the review criteria for IT investments.
- g. <u>Budget formulation</u>. During budget formulation, agencies are required to submit, in accordance with the requirements of OMB Circular A-11, the proposed IT portfolio of investments as part of the agency budget request. IT investments are to be included in the budget request whether they are existing projects and systems, incremental increases for existing projects and systems, or new initiatives.
 - h. Budget execution. The Control Phase of the CPIC process occurs during the budget execution cycle.
- i. <u>Systems Development Life Cycle (SDLC)</u>. SDLC is a disciplined approach to development, enhancements and modifications. The SDLC phases identify the appropriate activities and deliverables for each development phase. The activities and deliverables are used as references in preparing business cases. Movement from one SDLC phase to another is an appropriate milestone for measuring the success of planned progress.
- j. Acquisition planning. In accordance with the Federal Acquisition Regulations, the GSA Order OGP 2800.1 of January 2004 requires acquisition planning. One of the select criteria for IT investments is its acquisition plan. To ensure compliance with OMB Circular A-11, Section 300 requires agencies to use an EVM system compliant with American National Standards Institute (ANSI)\Electronic Industries Alliance (EIA) Standard-748-1998, "Earned Value Management Systems" for major investments involving Development, Modernization and Enhancement (DME) activity, SSO contracts including DME for these investments must contain a clause requiring the use of ANS\EIA compliant EVMS. Earned value management is

required in all support solicitations, contracts and orders of any type, which include DME lasting more than 6 months or costing more than \$250,000. Project Managers are required to conduct an Integrated Baseline Review (IBR) within six months after contract award to assure the accuracy of the contractor's planning and budgeting activities.

- 7. <u>CPIC policy</u>. The following policy statements are based on OMB and General Accounting Office (GAO) guidance and on best practices.
- a. <u>Select phase</u>. Annually, during budget formulation, business cases will be prepared for proposed major IT investments. The business cases will be submitted to the SSO CIOs and then to the GSA CIO for processing through screening, rating and ranking and selection processes. The SSO Technical Review Boards (TRB) and the Information Technology Review Boards (ITRB) will review and propose SSO IT investment portfolios. The Information Technology Council (ITC) will examine the proposed SSO portfolios from an enterprise perspective, aligning the investments with the agency strategic plan and its goals in a joint meeting with the Council of Controllers (COC). The ITC/COC will recommend the enterprise IT portfolio to the Business Systems Council (BSC) which will analyze the alignment factors and will review, modify as appropriate, and make funding recommendations on the IT portfolio to the Executive Committee. The Executive Committee makes the final IT portfolio recommendation for funding to the Administrator. The outcome is the agency's annual IT portfolio.
- b. <u>Control phase</u>. Institute performance measures and management processes that monitor and compare actual performance to planned results. For major IT investments that have projects in the DME phase, SSOs are required to use EVM with an EVM system that meets ANSI/EIA Standard-748 to plan, control, and report both government and contractor cost and schedule performance for any development work whether conducted during the planning or in the full acquisition phase and show how the IT investment is meeting the approved cost, schedule and performance goals. For IT investments in the Steady State phase, an operational analysis must be performed as defined in the OMB Capital Programming Guide to demonstrate if the investment is achieving its expected cost, schedule and performance goals. The IT Portfolio Management staff will review performance reports monthly and the ITC will review them quarterly. CIO will submit results quarterly to OMB. Performance reviews will be held quarterly. IT investments with negative variances of ten percent or more found during monthly monitoring require corrective actions plans. After consecutive three months of negative variance of 10 percent or greater, the Administrator will review those major acquisitions and decide whether there is continuing need for the major investment and what corrective actions, including termination, should be taken.
- c. <u>Evaluate phase</u>. After a system that resulted from a major IT investment is implemented, the IT Investment Portfolio staff will conduct a post implementation review to validate estimated benefits and costs, and document effective management practices.
- d. <u>Select capital asset investments</u>. Evaluate and select capital asset investments that support core mission functions that must be performed by the Federal government. Demonstrate projected returns on investment (maximum value) that are clearly equal to or better than alternative uses of available public resources.
- e. <u>No alternative source</u>. Initiate improvements to existing assets or acquisition of new assets only when no alternative private sector or governmental source can more efficiently meet the need.
- f. <u>Simplify or redesign work processes</u>. Undertake IT investments only after business process assessment and redesign occurs and then to reduce cost, improve effectiveness, and make maximum use of commercial services and off-the-shelf technology.
- g. <u>Reduce risk</u>. Reduce risk by avoiding or isolating custom designed components, using components that can be fully tested or prototyped prior to full implementation or production, ensuring involvement and support of users in the design and testing of the asset.
- h. <u>Useful segments</u>. Structure major acquisitions into useful segments with a narrow scope and brief duration, make adequate use of competition and appropriately allocate risk between government and contractor.
- i. <u>IT investment milestones</u>. For IT investments in the DME phase, milestones will correspond to the appropriate life cycle phase, showing planned cost and schedule goals. IT investments in the DME phase are not expected to have performance milestones. For IT investments in the Steady State phase, a milestone covering the year's cost and schedule for operations and maintenance is appropriate. Newly implemented or enhanced or modernized systems should have appropriate performance measures.
- j. <u>Enterprise architecture consistency</u>. IT investments having IT systems should be described by and consistent with the principles of the One GSA Enterprise Architecture.
- k. <u>System Development Life Cycle (SDLC) consistency</u>. IT investments will use SDLC discipline to plan and execute a project. The project scope, cost and complexity will determine level of SDLC documentation and reviews that are required.
- System life cycle reviews. New initiatives, pilot projects, and projects scheduled for enhancement will be reviewed by the Information Technology Architecture Planning Committee (ITAPC) before they transition from the planning to design systems life cycle phases.

- m. <u>Strategic Plan and Annual Performance Plan alignment</u>. IT investments will be aligned with the agency strategic and annual performance plans which in turn are aligned with the President's Management Agenda.
 - n. Security. IT investments will include security costs and adhere to GSA security standards and policies.
- o. <u>Value Management</u>. Value Measuring Methodology (VMM) is recommended to address IT investment's value, risk and cost.
- p. <u>Project Management</u>. Government project managers will follow project management processes such as those found in <u>A Guide to the Project Management Body of Knowledge Third Edition</u> (also called the <u>PMBOK® Guide Third Edition</u>). Government and contractor earned value data will be collected monthly, merged, and reported for a full picture of the performance progress of an IT investment.
- 8. <u>CPIC responsibilities</u>. CPIC is managed by the GSA OCIO through the Office of Enterprise Architecture and IT Capital Planning and the Office of Enterprise IT Investment Portfolio and Policy. The effort is carried out collaboratively with the SSOs.

a. GSA Administrator.

- (1) Champions the information technology CPIC process.
- (2) Establishes CPIC as an agency-wide priority, providing the highest level of support.
- b. Head of a Services or Staff Offices.
 - (1) Participates in the BSC and the Executive Committee.
 - (2) Appoints a TRB and an ITRB to implement the CPIC process.
- (3) Develops IT investment submissions in conformance with OMB Circular A-11 guidance and with the GSA Strategic Plan, the SSO Performance Plan, the IRM Strategic Plan/Five-Year Plan and the GSA IT CPIC Guide. Ensures the SSO IT investment submissions contain the IT activities of the total organization including the requirements of Regional Offices.
- (4) Ensures accuracy and completeness of resource requests. SSO annual budget requests must include the resources needed to support its IT investments.
- (5) Develops IT performance goals and measures for the IT investment proposals that are consistent with and support business mission and the goals in the GSA and IRM Strategic Plans and the SSO performance plans.
- (6) Ensures the contractors supporting IT investments have an ANSI/EIA Standard 748 compliant EVM system from which the contractor reports earned value performance data to the government on a monthly basis. The government project manager will provide surveillance to ensure the contractor's system meets the ANSI standard.
- (7) Ensures that IT investments with DME activities are closely monitored, using earned value management data, and that corrective actions are taken if variances exceed negative ten percent.
- (8) Ensures that IT investments in steady state are closely monitored using operational analysis and takes corrective action if variances exceeding negative 10 percent are reported. Initiate development, modernization or enhancement if expected benefits fail to be realized.
- (9) Assures IT projects and activities are managed to ensure positive cost and schedule performance as well as to ensure the realization of expected benefits.
- (10) Performs and documents analyses as necessary and appropriate to the life cycle phase of the project and provides required life cycle and acquisition management documentation to the OCIO, and the ITC upon request.
- (11) Assures that major project investment documentation and cost and schedule status information is maintained as required and submits business plans and status reports to the OCIO.
- (12) Submits capital planning and IT investment documentation to the OCIO for review and presentation to the ITC, the BSC and Executive Committee.

c. GSA Chief Information Officer (CIO).

- (1) Ensures the development of the CPIC processes in support of the GSA Strategic Plan and the missions, goals, strategies, and priorities of the agency.
- (2) Ensures agency and government-wide guidance and training is provided to assist SSOs in implementation of CPIC processes.

- (3) Appoints a capital planning representative to assist each SSO in carrying out the CPIC processes, managing IT investments, and keeping life cycle management and project status information up to date.
 - (4) Prepares and updates the IT CPIC Guide.
 - (5) Appoints representatives from the OCIO to participate in SSO TRBs.
 - (6) Provides staff support to the ITC and the IT Planning Committee.
 - (7) Assists each SSO in developing submissions to the IRM Strategic Plan/Five-Year Plan.
 - (8) Reviews and analyzes each proposed IT investment and coordinates ITC and BSC annual selection activities.
- (9) Provides assistance and training to help SSOs complete business cases, document capital planning, IT investment control, and life-cycle management processes and analyses.
 - (10) Coordinates the development of OMB Circular A-11 Budget Exhibits.
 - (11) Ensures compliance with appropriate GSA orders and handbooks.
- (12) Develops and publishes the GSA IRM Strategic Plan/Five-Year Plan. Notifies the SSOs when the plan is published and makes it available electronically.
- (13) Ensures that the CPIC process, enterprise architecture, IT security, enterprise engineering and program management processes are properly synchronized and linked.
 - (14) Chairs quarterly IT investment performance reviews with the ITC and BSC.
- (15) Advises the GSA Administrator regarding whether to continue, modify or terminate a program or project that is outside cost, schedule, or performance tolerances over a three-month period.
 - d. GSA Service and Staff Office Chief Information Officer (SSO CIO).
 - (1) Appoints SSO TRB and ITRB. Chairs or appoints chairs for those boards.
- (2) Provides IT investment earned value and operational analysis data and investment performance status reports monthly to the CIO.
 - (3) Represents the SSO on the ITC for quarterly IT investment performance reviews.
 - (4) Synchronizes SSO IT activities with the CIO.

e. Project Manager.

- (1) Prepares business cases and manages IT investments in accordance with this order and other relevant orders and the IT CPIC Guide, in addition to using best practices.
- (2) For development, modernization, or enhancement projects, or those in mixed life cycle, uses an ANSI Standard 748 compliant earned value management system to collect government earned value data and merge that data with the contractor's earned value data for a full picture of the IT investment performance. Ensures the contractor's earned value system is compliant with ANSI Standard 748 and follows its guidelines. Provides surveillance over contractors to assure they are planning, controlling and reporting project management information on a monthly basis.
- (3) For a steady state project, performs a monthly operational analysis to determine if the asset is performing within baseline cost, schedule, and performance goals and provides reports to the SSO TRB. Provides monthly IT investment performance status reports for the CIO.
- (4) For a DME project, performs a monthly analysis of earned value data and provides reports to the SSO TRB of any negative variance with planned cost and schedule of milestones. In cases of negative variance exceeding ten percent, develops and implements a get-well plan and reports the results to the SSO ITRB and its CIO. Provides monthly IT investment performance status reports for the CIO.

f. Business Systems Council (BSC).

(1) Members are the GSA CIO, GSA Deputy Administrator, Commissioners of Public Buildings Service, Federal Supply Service and Federal Technology Service, Associate Administrator of the Office of Government-wide Policy, the Chief Financial Officer, the Chief People Officer, the Associate Administrator of the Office of Citizen Services and Communications, and three Regional Administrators (chosen by the Regional Administrators). The GSA CIO is the Chair.

- (2) As a subset of the Executive Committee, its purpose is to determine the direction, interface and impact of IT on achieving business objectives and to do so in conjunction with the Strategic Planning, Budget and Performance process, the Human Capital Planning process, the IT Capital Planning and Investment Control process and related business process changes. The Information Technology Council, Competitive Sourcing Executive Steering Committee, Human Capital Council, Marketing Council and other GSA governing bodies will provide input to BSC for decision making about the best use of information technology as measured by:
 - (a) Improvements in customer satisfaction (attraction, retention, and cost recovery);
- (b) Return on investment from productivity gains (IT-enabled process improvements, reduced or avoided costs of duplication, proliferation, or incompatibility);
 - (c) Better sharing of information and technology resources; and
 - (d) Enhanced security and legal compliance.
- (3) Performs the following functions to determine the direction, interface and impact of IT on achieving business objectives and to propose and monitor IT policies and programs ensuring their consistency throughout the agency:
- (a) Ensures the strategic alignment of GSA's IT investments with the mission, business goals, objectives and priorities of the agency;
- (b) Provides final approval on IT strategies, major IT investments, and management controls, particularly for those implementing enterprise architecture, crosscutting investments and interfaces among application systems;
 - (c) Ensures the complete review of the benefits, risks and costs associated with IT investments;
 - (d) Decides the direction and emphasis of GSA's IT program;
 - (e) Identify technological innovations in support of improving GSA's competitive edge;
 - (f) Assists the agency to link programs and business needs with technical solutions;
 - (g) Determines how IT can be utilized to effectively support the GSA mission in the years ahead;
- (h) Reviews recommendations from the ITC and determines whether to continue, modify, or terminate a program or project that is outside tolerance, where the performance shows significant variances from planned cost, schedule, and performance goals over a three month period.
 - (4) Acts on recommendations brought forth by the ITC on IT policies, programs and strategic IT investments.
 - g. Information Technology Council.
 - (1) Members are the SSO's CIOs. The GSA CIO is the chair.
 - (2) Functions as the BSC planning and investment review working group.
 - (3) Meets monthly.
 - (4) Meets quarterly with the Council of Controllers (COC), made up of the SSO's CFOs to:
 - (a) Reviews IT proposed investments;
 - (b) Reviews recommendations from the SSO TRBs and ITRBs;
 - (c) Conducts quarterly performance reviews of the major IT investments in the portfolio;
- (d) Assesses the IT portfolio by reviewing information provided to the OCIO including cost and schedule variances and performance information;
- (e) Recommends actions to maintain or adjust the IT portfolio through the continuation, acceleration, deferral, cancellation, or addition of IT investments to the BSC;
 - (f) Refers high-risk IT investments to the BSC; and
- (g) Reviews and acts on requests for baseline changes to current year funding and performance measurement information provided by the IT investment managers.
- (5) Proposes and monitors implementation of policies, programs, standards, performance measures, benchmarks, and strategies to ensure their consistency throughout the agency.

- (6) Reviews proposed major IT investments, evaluates the technical risks, reviews the schedule and cost sensitivity, reviews the organizational impact, business process redesign needs and personnel training and technical resource needs.
 - (7) Makes IT Portfolio funding recommendations to the BSC.
- (8) Reviews the success in achieving IT investments' cost and schedule of milestones based on earned value analysis.
 - (9) Reviews the success in achieving IT investment's performance milestones.
 - (10) Periodically reviews success in mitigating risks in high-risk projects.
 - (11) Makes corrective action recommendations as necessary to SSOs or to the BSC.
 - (12) Endorses GSA's IRM Strategic Plan/Five-Year Plan.
 - (13) Provides advice and assistance to the GSA CIO.
 - (14) Coordinates IT issues across the enterprise.
 - (15) Establishes special subcommittees as needed to address selected issues.
 - (16) Reviews and acts on the One GSA Enterprise Architecture and on key IT security initiatives.
 - h. Information Technology Resources Board (ITRB).
 - (1) Each SSO has an ITRB. The GSA CIO is a voting member on all ITRB boards.
- (2) The General Management and Administration (GM&A) Information Technology Investment Board (ITIB) is an ITRB-like entity. The GM&A ITIB is chaired by the OCIO Chief Technology Officer. One representative for the Services and Office of Government-wide Policy is a voting member on the ITIB. Members of the ITIB determine which Service representative will participate in ITIB deliberations.
 - Rates and ranks, then selects IT investments to be included in the proposed SSO IT portfolio;
 - (4) Enacts Special Review Boards (SRBs) as needed.
- (5) Monitors IT investments earned value documentation. Makes corrective action recommendations if cost and schedule of milestones show negative variances exceeding ten percent.
 - Technical Review Board (TRB).
- (1) Each SSO has a TRB. The TRB is chaired by the SSO CIO or the CIO's appointed alternate. The GSA CIO is a voting member on all SSO TRBs. One representative from each of the Services, who is a subject matter expert, is a voting member on the GM&A TRB.
- (2) Tailors the set of SDLC documentation and the number of milestone reviews consistent with the IT investment's scope, risk, and visibility.
 - (3) Conducts technical assessments of the proposed IT investments and makes recommendations to the SSO ITRB.
- (4) Conducts technical reviews to monitor IT investments, using earned value management methods, and if negative variances occur, makes recommendations to the SSO ITRB.
 - (5) Provides an integrated process linking CPIC, Enterprise Architecture, IT security, budget, and procurement.
 - j. IT Planning Committee (ITPC).
- (1) Members are IT planning representatives from the SSOs. The ITPC is chaired by the GSA OCIO IT Capital Planning Director.
- (2) Meets at the beginning of the planning year to review new requirements for the SSOs during the IT Select Phase.
 - (3) Meets periodically to address CPIC issues.
 - (4) Acts as a liaison between the CPIC offices in OCIO and the SSOs.
- 9. Waivers. The GSA CIO is the decision-making authority for these policies. The CIO may waive a requirement contained

herein if its implementation is contrary to sound business judgment and is not required by law. This order does not cover GSA personnel acquiring IT products and services and other electronic and IT resources for agencies other than GSA.

- 10. <u>References</u>. The following documents provide further guidance. Most can be found on the Capital Planning web site. Each can be found in the sponsoring agency's site. Orders are found in InSite under the Document Library.
- a. The IT Capital Planning and Investment Control Guide. The IT CPIC guide is kept current and is found on the CIO web site under Capital Planning.
- b. <u>OMB Circular A-11</u>. This circular provides annually updated guidance for budget formulation. It contains instructions for the IT Capital Asset Plan and Business Case (Exhibit 300), the Agency IT Investment Portfolio (Exhibit 53).
 - c. OMB Circular A-130. This circular provides guidance for the CPIC process.
- d. <u>OMB Capital Programming Guide</u>. The Capital Programming Guide is a supplement to the OMB Circular A-11, Part 3: Planning, Budgeting, and Acquisition of Capital Assets.
- e. <u>OMB Memorandum M-04-24</u>. Expanded Electronic Government (E-Gov) President's Management Agenda (PMA) Scorecard Cost, Schedule and Performance Standards for Success.
 - f. OMB Memorandum M-05-23. Improving Information Technology (IT) Project Planning and Execution.
- g. <u>GAO Information Technology and Investment Management: An Overview of GAO's Assessment Framework.</u> The GAO framework provides investment management maturity stages and critical processes.
- h. <u>ANSI Standard 748, Earned Value Management System</u>. The EVMS standard proscribes criteria that an EVM system must meet in order to report earned value of work completed.
- i. <u>Federal Acquisition Regulation (FAR) Subpart 34.2.</u> Earned Value Management System; 34.201 Policy. (http://www.acqnet.gov/far/current/html/subpart%2034 2.html#wp1111816).
- <u>A Guide to the Project Management Body of Knowledge</u> Third Edition (also called the <u>PMBOK® Guide Third Edition</u>). Published by the Project Management Institute (PMI). A recognized standard handbook for project managers.
- k. <u>OPM 2210 Series IT Project Management Guidance</u>. The Office of Personnel Management's guidance of the competencies expected from IT project managers.
 - I. GSA Order CPO 1878.1, GSA Privacy Program.
 - m. GSA Order CIO 2110.1, The "One GSA" Enterprise Architecture Policy.
 - n. GSA Order CIO HB 2100,1A, GSA Information Technology Security Policy.
 - o. GSA Order OGP 2900.1, Acquisition Planning.
 - p. GSA Acquisition Letter V-05-01 & Supplement 1, Implementation Policy in GSA.
 - q. GSA Order CIO P 2140.2, Systems Development Life Cycle (SDLC) Policy Handbook.
 - r. GSA CIO 2105.1, Managing Electronic and Information Technology for People with Disabilities.
 - s. Charter for the Business Systems Council.
 - t. NIST Special Publication 800-65 Integrating IT Security into the Capital Planning and Investment Control Process.
- 11. Legal authority. The following laws apply to the IT CPIC process:
 - a. The Clinger-Cohen Act of 1996.
 - b. The Federal Information Security Management Act Title 3 of the E-GOV Act of 2002.
 - c. The Government Performance and Results Act of 1993.
 - d. The Federal Acquisition Streamlining Act of 1994.
 - e. The E-GOV Act of 2002.
 - f. The Privacy Act of 1974.

- g. The Computer Matching and Privacy Protection Act of 1988.
- h. The Paperwork Reduction Act of 1995.
- i. The Paperwork Reduction Act of 1995.
- j. The Government Paperwork Elimination Act of 1998.
- k. The Chief Financial Officers Act of 1990.

MICHAEL W. CARLETON Chief Information Officer

Attachment A: CPIC - Related Definitions

The following definitions are terms peculiar to CPIC, derived from the Clinger-Cohen Act, OMB guidance, or common practice.

- a. <u>Capital assets</u>. Capital assets are structure, equipment, intellectual property (software), and information technology (including IT service contracts) that are used by the Federal government and have an estimated useful life of two years or more. Capital assets do not include items acquired for resale in the ordinary course of operations or items that are acquired for physical consumption, such as operating materials and supplies. Capital Assets may be acquired in different ways: through purchase, construction, or manufacturing; through a lease-purchase or other capital lease (regardless whether title has passed to the Federal government); through an operating lease for an asset with an estimated useful life of two years or more; through a share-in-savings contract, when appropriate; or through exchange.
- b. <u>Capital planning and investment control (CPIC)</u>. CPIC is a decision-making process for ensuring that IT investments integrate strategic planning, budgeting, procurement, and the management of IT in support of the agency's mission and business needs. The term comes from the Clinger-Cohen Act and generally is used in relationship to IT management issues.
- c. <u>Development, Modernization, Enhancement (DME)</u>. Within major investments, modernization projects or systems undergoing enhancements or modernization are considered to be in development status. Projects in development status require close monitoring, using earned value management, during the Control Phase of the CPIC cycle.
- d. <u>Earned value management (EVM)</u>. EVM is a project (IT investment) management tool that effectively integrates the investment scope of work with schedule and cost elements, for optimum investment planning and control. The qualities and operating characteristics of EVM systems are described in the American National Standards Institute (ANSI) / Electronic Industries Alliance (EIA) Standard-748-1998 *Earned Value Management Systems*.
- e. <u>Federal Enterprise Architecture (FEA)</u>. A framework that describes the relationship between business functions and the technologies and information that support them. Major IT investments will be aligned against each reference model within the FEA framework. The following reference models apply:
- (1) <u>Business Reference Model (BRM)</u>. BRM is a function driven framework that describes the lines of business and internal functions performed by the Federal government, independent of the agencies that perform them.
- (2) <u>Performance Reference Model (PRM)</u>. PRM is a standardized performance measurement framework designed to characterize performance in a common manner. The PRM is intended to help the agency produce enhanced performance information; improve the alignment and better articulate the contribution of inputs, such as technology, to outputs and outcomes; and identify improvement opportunities that span traditional organizational boundaries.
- (3) <u>Service Component Reference Model (SRM)</u>. SRM provides a common framework and vocabulary for characterizing the IT and business components that collectively comprise an IT investment. The SRM is intended to help agencies rapidly assemble IT solutions through the sharing and reuse of business and IT components. A component is a self-contained process, service, or IT capability with pre-determined functionality that may be exposed through a business or technology interface.
 - (4) Technical Reference Model (TRM). TRM provides a framework to describe the standards, specifications, and

technologies supporting the delivery, exchange, and construction of business or service components and eGov solutions. The TRM unifies existing agency TRMs and eGov guidance by providing a foundation to advance the reuse of technology and component services from a government-wide perspective.

- f. <u>Information Technology (IT)</u>. As defined by the Clinger-Cohen Act, IT means any equipment or interconnected system or subsystem of equipment that is used in the automatic acquisition, storage, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data or information. For purposes of this definition, equipment is "used" by an agency whether the agency uses the equipment directly or it is used by a contractor under a contract with the agency that requires the use of such equipment or requires the use, to a significant extent, of such equipment in the performance of a service or the furnishing of a product. IT includes computers, ancillary equipment, software, firmware and similar procedures, services (including support services), and related resources. It does not include any equipment that is acquired by a Federal contractor incidental to a Federal contract.
- g. <u>Integrated Baseline Review (IBR)</u>. An IBR is a joint Government/Contractor assessment of the ability of the project's technical plan to achieve the objectives of the scope of work; adequacy of the time allocated for performing the defined tasks to successfully achieve the project schedule objectives; ability of the Performance Measurement Baseline (PMB) to successfully execute the project and attain cost objectives, recognizing the relationship between budget resources, funding, schedule, and scope of work; availability of personnel, facilities, and equipment when required, to perform the defined tasks needed to execute the program successfully; and the degree to which the management process provides effective and integrated technical/schedule/cost planning and baseline control. IBRs are intended to provide a mutual understanding of risks inherent in offerors'/contractors' performance plans and underlying management control systems and to formulate a plan to handle these risks.
- h. <u>Integrated Project Team (IPT)</u>. IPT means a multi-disciplinary team led by a project manager responsible and accountable for planning, budgeting, procurement, and lifecycle management of the investment to achieve its cost, schedule, and performance goals. Team skills include: budgetary, financial, capital planning, procurement, user, program, earned value management, value management, and other staff skills as appropriate.
- i. <u>Lifecycle costs</u>. Lifecycle costs mean the overall estimated cost, both Government and contractor, for a particular program, including direct and indirect initial cost plus any periodic or continuing costs of operations and maintenance.
- j. <u>Major acquisition</u>. A major acquisition is a capital project (investment) that requires special management attention because of its: importance to the agency's mission; high development, operating, or maintenance costs; high risk; high return; or significant role in the administration of the agency's program.
 - k. Major IT investment. Major IT investment means a system or investment that:
- · requires special management attention because of its importance to the agency's mission;
- · investment was a major investment in the previous year and is continuing;
- · investment is for a financial system and spends more than \$500,000 annually;
- · investment is directly tied to the top two layers of the Federal Enterprise Architecture (Services to Citizens and Mode of Delivery);
- · investment is an integral part of the agency's modernization blueprint (the Enterprise Architecture target vision);
- · investment has significant program or policy implications; or
- · investment has high executive visibility; investment is defined as major by the CPIC process.
 - I. Mixed life cycle investment. An investment that has both DME and steady state aspects.
- m. <u>Non-major IT investments</u>. Non-major investments do not meet the threshold criteria. Non-major investments require a modified set of business information.
- n. Ongoing IT investment. An ongoing IT investment is one that has been through a complete budget cycle with OMB and represents budget decisions consistent with the President's Budget for the current year.
- o. <u>Operational</u>. Operational or steady state means an asset or part of an asset that has been delivered and is performing the mission.
- p. <u>Performance based acquisition management</u>. A documented, systematic process for program management, which includes integration of program scope, schedule, and cost objectives, establishment of a baseline plan for accomplishment of program objectives, and use of earned value for those parts of the investment where developmental effort is required. This may include prototypes and tests to select the most cost effective alternative during the planning phase.
- q. <u>Performance Management Baseline (PMB)</u>. The PMB is the time-phased budget plan against which contract performance will be measured. The PMB is formed by aligning the budget to scheduled cost accounts.
- r. <u>Planning phase</u>. The period during which a system concept is under consideration and funding is required to assess its feasibility. Planning means preparing, developing or acquiring the information to:
 - · design the investment; assess the benefits, risks, and risk-adjusted life cycle costs of alternative solutions;
 - · and establish realistic cost, schedule, and performance goals, for the selected alternative, before either proceeding

to full acquisition of the capital investment or useful segment or terminating the investment.

Planning must progress to the point where the agency is ready to commit to achieving specific goals for the completion of the acquisition before proceeding to the acquisition phase. Information gathering activities may include market research of available solutions, architectural models, engineering and design studies, and prototypes. Planning is a useful segment of a capital investment. One or more planning segments may be necessary.

- s. <u>Privacy Impact Assessment (PIA)</u>. A process for examining the risks and ramifications of collecting, maintaining and disseminating information in identifiable form in an electronic information system, and for identifying and evaluating protections and alternative processes to mitigate the impact to privacy of collecting information in identifiable form. The agency must conduct privacy impact assessments for all new or significantly altered IT investments administering information in identifiable form collected from or about members of the public. PIAs may be conducted for systems collecting information about employees, at the agency's discretion.
- t. <u>Risk-adjusted life cycle costs</u>. The overall estimated cost for a particular investment alternative over the time period corresponding to the life of the investment, including direct and indirect initial costs plus any periodic or continuing costs of operation and maintenance that have been adjusted to accommodate any risk identified in the risk management plans.
- u. <u>Section 508</u>. Refers to Section 508 of the Rehabilitation Act of 1973, as amended, which requires the agency to develop, procure, maintain, or use electronic and information technology that is accessible to Federal employees and members of the public with disabilities.
- v. <u>Share-in-savings contract</u>. A contract for IT to improve mission-related or administrative processes or to accelerate achievement of the agency mission and to share with the contractor in savings achieved through contract performance.
- w. <u>Steady state</u>. A project that is in operations and maintenance and has no associated development, modernization or enhancement activities is considered to be in steady state. Projects in steady state status require close monitoring, using operational analyses.
- x. <u>Useful segment or module</u>. An economically and programmatically separate component of an investment that provides a measurable performance outcome for which the benefits exceed the cost even if no further funding is appropriated.